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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/295,463 04/13/99 COWSERT

L ISIS-3455

HM12/0928

EXAMINER

MARSCHER, A

ART UNIT

PAPER NUMBER

1631

8

DATE MAILED:

09/28/00

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**Application No.  
09/295,463

Applicant(s)

Cowser et al.

Examiner

Ardin Marschel

Group Art Unit

1631

☐ Responsive to communication(s) filed on \_\_\_\_\_☐ This action is **FINAL**.☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claim**☒ Claim(s) 1-54 \_\_\_\_\_ is/are pending in the applicant

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.☐ Claim(s) \_\_\_\_\_ is/are rejected.☐ Claim(s) \_\_\_\_\_ is/are objected to.☒ Claims 1-54 \_\_\_\_\_ are subject to restriction or election requirement.**Application Papers**☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.☐ The specification is objected to by the Examiner.☐ The oath or declaration is objected to by the Examiner.**Priority under 35 U.S.C. § 119**☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been☐ received.☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).**Attachment(s)**☐ Notice of References Cited, PTO-892☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_☐ Interview Summary, PTO-413☒ Notice of Draftsperson's Patent Drawing Review, PTO-948☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1631.

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1, 2, 5, 21, 22, 25, and 41-46; drawn to computer products and methods of defining a set of compounds that modulate the expression of a target nucleic acid sequence via defined criteria *in silico* without requiring actual physical compound synthesis or actual physical assay for biological effects; classified in Class 702, subclass 19.

II. Claims 3, 4, 6-20, 23, 24, 26-40, and 47-54; drawn to computer products and methods of defining a set of compounds that modulate the expression of a target nucleic acid sequence via defined criteria *in silico* with also requiring compound synthesis or assay for biological effects, classified in Classes 435, 530, and 536; subclasses 6, 333, and 25.3; respectively.

The inventions are distinct, each from the other because of the following reasons:

The inventions of Group I and Group II are directed to distinct inventions in that Group I is totally performed and utilized in a computer without actual physical preparation of compounds which are designed therein versus Group II which requires the actual physical preparation and/or assay of

compounds. Physical versus virtual compounds are clearly distinct entities both in form as well as potential available usage. The publication of computer design or simulations of compounds in virtual form is a well known technology and has been the subject of a multitude of such publications without actual compound synthesis or assay. On the other hand the preparation and assay of compounds are also represented by an enormous list of publications many with minimal, if any, computer simulations connected thereto and would have to be considered in a search for the subject matter of Group II. In summary, the virtual world of publications is generally separate, albeit not always, from the physical compound synthesis and assay world of publications, both being enormous. Thus, it is deemed an undue search burden to search Groups I and II together thus supporting this restriction requirement.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR § 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in

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compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

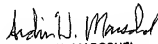
Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CMI Fax Center number is either (703) 308-4242 or (703) 305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technical Center receptionist whose telephone number is (703) 308-0196.

September 26, 2000

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER